Technischer Kundendienst
UTS-Universal Technik-Service GmbH

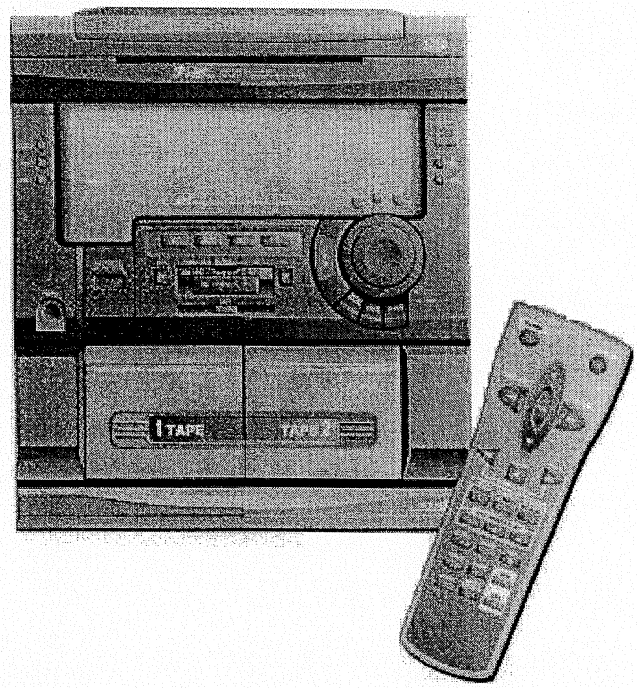
Technische Unterlage

Best.-Nr.:

035.812.7

ETNr. 2231199

VTC - CD 4097



UTS-Nr.:	999	QUELLE
Best.Nr.:	0358127/01	
Ger.Bez.:	UNIVERSUM-MINI-ANLAGE	
GKz:	G	GERAET
WGT:	650	MICRO-/MINI-ANLAGEN
KD-Sektor:	R	RUNDFUNK
BaumNr.:	00	KEIN DIAGNOSEBAUM VORHANDEN
Klassierung:	STK	STEREOKOMBINATION
IFW-FehlerGru.:	205	RDF.,VERST.,TB.,PHONO,CD,CB
Type/Privileg/Universum.Nr		VTC-CD4097
Beschreibung		
VK-Preis: 399.00		
Serviceart:	01	QUELLE-TKD
Garantie fuer Kunden	12	Monate
Sondervereinbarungen:	0	SIEHE SERVICEART

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SAFETY PRECAUTIONS

WARNING TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION
RISK OF ELECTRIC SHOCKS
DO NOT OPEN

CAUTION TO REDUCE THE RISK IF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULTED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.

THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

CAUTION
TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

LASER SAFETY
THIS UNIT EMPLOYS A LASER. ONLY QUALIFIED SERVICE PERSONNEL SHOULD REMOVE THE COVER OR ATTEMPT TO SERVICE THIS DEVICE DUE TO POSSIBLE EYE INJURY.

CAUTION :USE OF ANY CONTROLS, ADJUSTMENTS, OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION :TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION :POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

Important Safety Instructions

- All the safety and operating instructions should be read before the appliance is operated.
- The safety and operating instructions should be retained for future reference.
- All warnings on the appliance and in the operating instructions should be adhered to.
- All operating and use instructions should be followed.

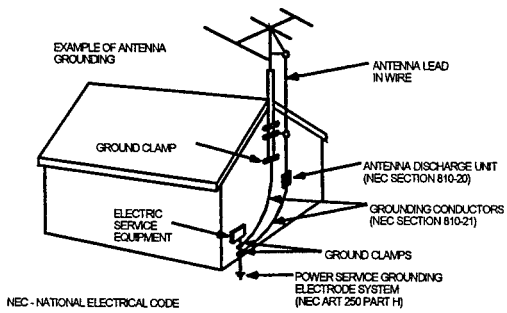
1. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.

PORTABLE CART

Figure 2

2. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by th manufacturer.
3. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
4. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
5. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
6. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
7. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
8. Grounding or Polarization - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
9. Power - Cord Protection - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
10. Protective Attachment Plug - The appliance is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
11. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
12. Power Lines - An outdoor antenna should be located away from power lines.

13.Outdoor Antenna Grounding - If an outside antenna is connected to the receiver be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-dis charge unit, size of grounding conductors,location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode. See Figure 1.


EXAMPLE OF ANTENNA GROUNDING
ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
GROUNDING CONDUCTORS (NEC SECTION 810-21)
ELECTRIC SERVICE EQUIPMENT
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250 PART H)
NEC - NATIONAL ELECTRICAL CODE

14.Non-use Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

15.Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

16.Damage Requiring Service - The appliance should be serviced by qualified service personnel when:

a) The power-supply cord or the plug has been damaged; or

b) Objects have fallen, or liquid has been spilled into the appliance; or

c) The appliance has been exposed to rain; or

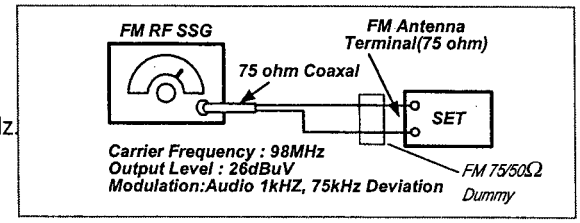
d) The appliance does not appear to operate normally or exhibits a marked change in performance; or

e) The appliance has been dropped, or the enclosure damaged.

17.Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

ADJUSTMENTS

1. TUNER SECTION



TEST EQUIPMENT

1. Signal Generator with a frequency range of FM broadcast.
2. Oscilloscope with a side amplifier of approximately 100 KHz.
3. FM 75/50Ω dummy antenna.
4. VTVM

FM ALIGNMENT

1. Turn on the FM signal generator and the VTVM allowing 15 minutes warming-up period.
2. Connect the VTVM across the headphone jack or speaker terminal.
3. Set signal generator frequency as listed in ALIGNMENT CHART and maintain a sufficient output level to provide an indication on VTVM.

NOTE

1. Use a screwdriver with plastic or ceramic grip for all adjustments.

2. Standard test frequency 1 KHz and deviation 75 KHz for FM.

- FM RF, IF ALIGNMENT CHART -

Step	Item	Input Circuit Setup	Output Circuit Setu	Tuner Setting	Adjust Point	Adjustment
1	FM IF Adjustment	Connect stereo signal generator to FM ANT terminal (J001)	Connect DC voltmeter across R201	FM98MHz75KHz Dev. 26dBμ	L203	Adjust forDC 0V±0.1V
2	Auto Stop Sensitivity	Connect stereo signal generator to FM ANT terminal (J001)	Connect DC voltmeter across RV201	FM 98MHz 75KHz Dev. 26dBμ	RV201	Adjust for DC 1.17V±0.02V Confirm stereo indicator is lighted and L/R channel is separated.

Unless other specified set being switched FM mode, adjust generator's frequency to center of the FM band where no FM broadcast exists Otherwise adjustment of FM usable sensitivity, frequency range for FM band are not needed, but confirm these data are satisfied with specification.

CAUTION : When realigning the FM receiving frequency the highest end of the frequency range should not be more than 108 MHz and the lowest end of the frequency range should not be less than 87.5 MHz, in order to comply with FTZ regulation in West Germany.

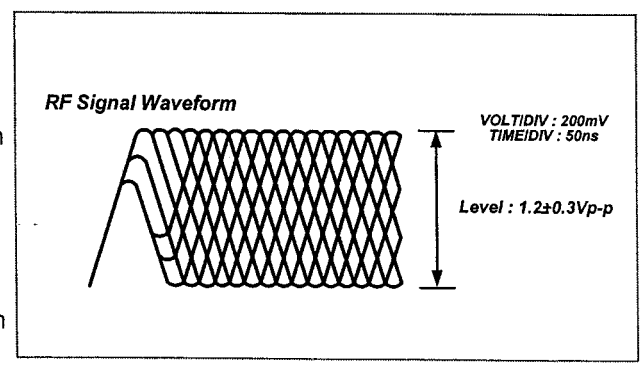
2. CD SECTION

***Note:** 1. Use the oscilloscope with more than 10MΩ impedance.*

2. Clean the laser object lens using natural detergent and a soft applicator when the signal level is lower than the value as indicated in the following checks.

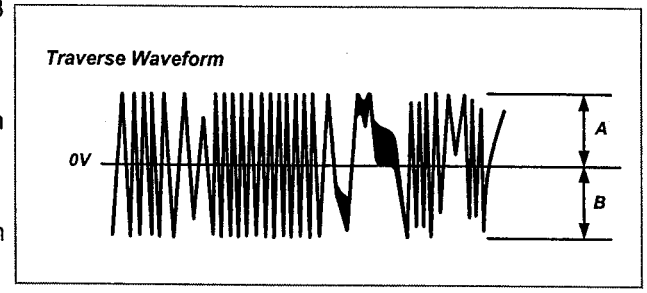
RF LEVEL CHECK

1. Connect oscilloscope to test point TP502 and IC502 Pin66 on CD PCB.
2. Press power switch on.
3. Put test disc(TCD-781) in and press play button then pause button.
4. Confirm that oscilloscope waveform is clear. Clear RF signal waveform means that the shape"#"can be clearly distinguished at the center of waveform.
5. Adjust RV501 to get a clear waveform and maximum amplitude.



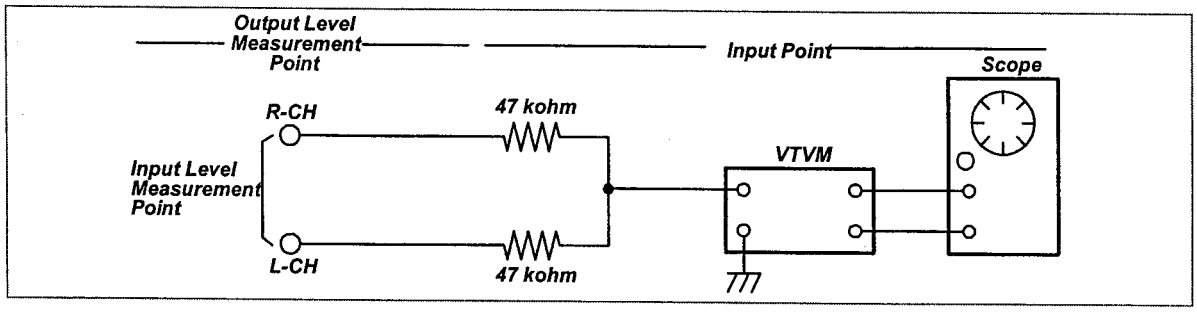
E-F BALANCE ADJUSTMENT

1. Connect oscilloscope to test point TP502 and TP503 on CD PCB.
2. Press power switch on.
3. Put test disc(TCD-781) in and press play button then pause button.
4. Press Fast Forward button and adjust RV502 for a symmetrical waveform on the oscilloscope in relation to 0V.



* Design and specifications may be subject to change without notice.

3. TAPE SECTION



Test Tape be used

Tape	Contents	Use
MTT-111N	3 KHz	Tape Speed Adjustment
MTT-114N	10 KHz	Head Azimuth Adjustment
MTT-5511	Blank	Record Frequency Property

HEAD ADJUSTMENT (AZIMUTH)

1. 10KHz test tape(example: MTT-114N) must be used for this adjustment.
2. Connect to a VTVM or oscilloscope to the headphone jack or speaker terminal.
3. Press the play button.
4. Adjust the azimuth by using a screwdriver to maintain the max. L&R output voltage.
5. Adjust tape A(1), tape B(2) respectively, Please secure the azimuth position by using locking paint.

RECORDING BIAS OSCILLATOR FREQUENCY ADJUSTMENT

1. Connect the frequency counter to TP603, GND.
2. Press the REC button.
3. Adjust L603 to obtain 80 KHz±100Hz

ADJUSTMENTS

TAPE ALIGNMENT CHART								
Step	Item		Reference Value	Test Tape	Adjust Point	Test Point	Note	FIG.
1	Tape Speed Adjustment	Normal	3,000~3,010Hz	MTT-111N	RV601	Line Out L/R Channel	Be sure Wow & Flutter is within 0.35% Adjust Tape Speed of end position after adjustment at tape start position	FIG.1
		High	5,820~6,180Hz	MTT-111N	------	Shorted TP601, TP602	Confirm High speed after normal speed adjustment	FIG.1
2	Azimuth Adjustment		Maximum Level Phase:Within90°	MTT-114N	Head Screw	Line Out L/R Channel		FIG.2,3,4
3	Recording Bias Oscillator Frequency Adjustment		80 KHz±0.5	MTT-5511	L603	TP603,GND	Adjust with frequency counter connected.	FIG.1

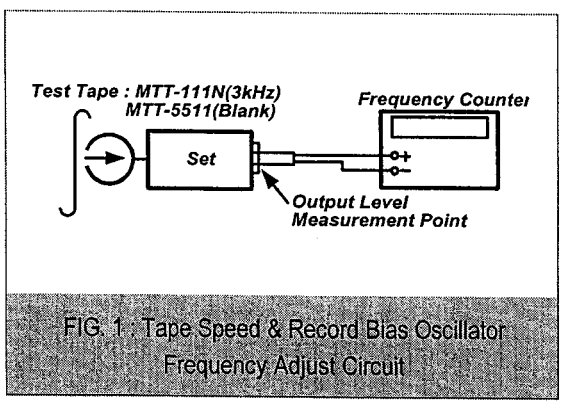


FIG. 1 : Tape Speed & Record Bias Oscillator Frequency Adjust Circuit

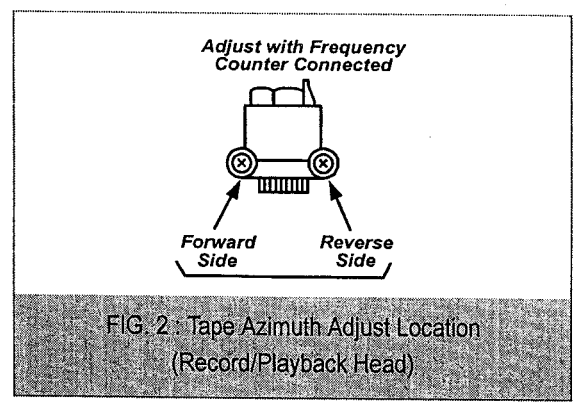


FIG. 2 : Tape Azimuth Adjust Location (Record/Playback Head)

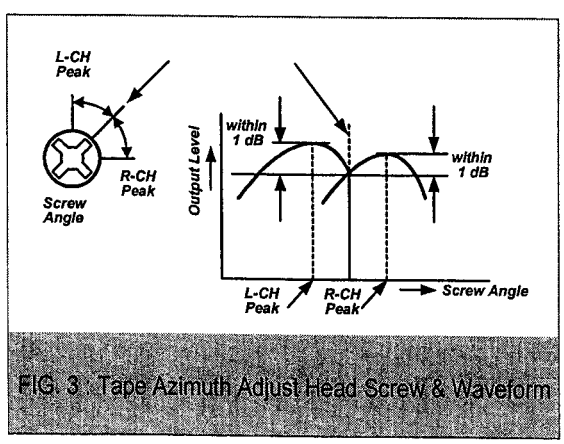


FIG. 3 : Tape Azimuth Adjust Head Screw & Waveform

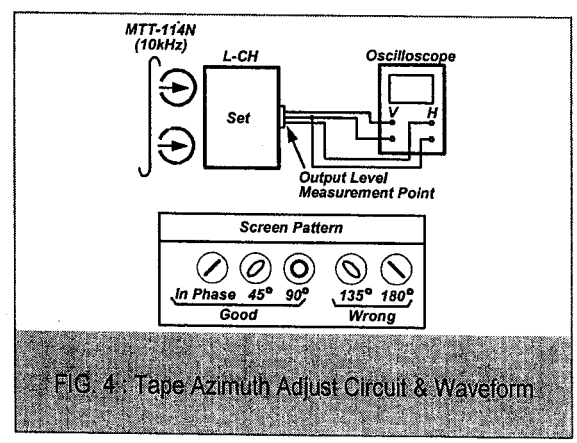
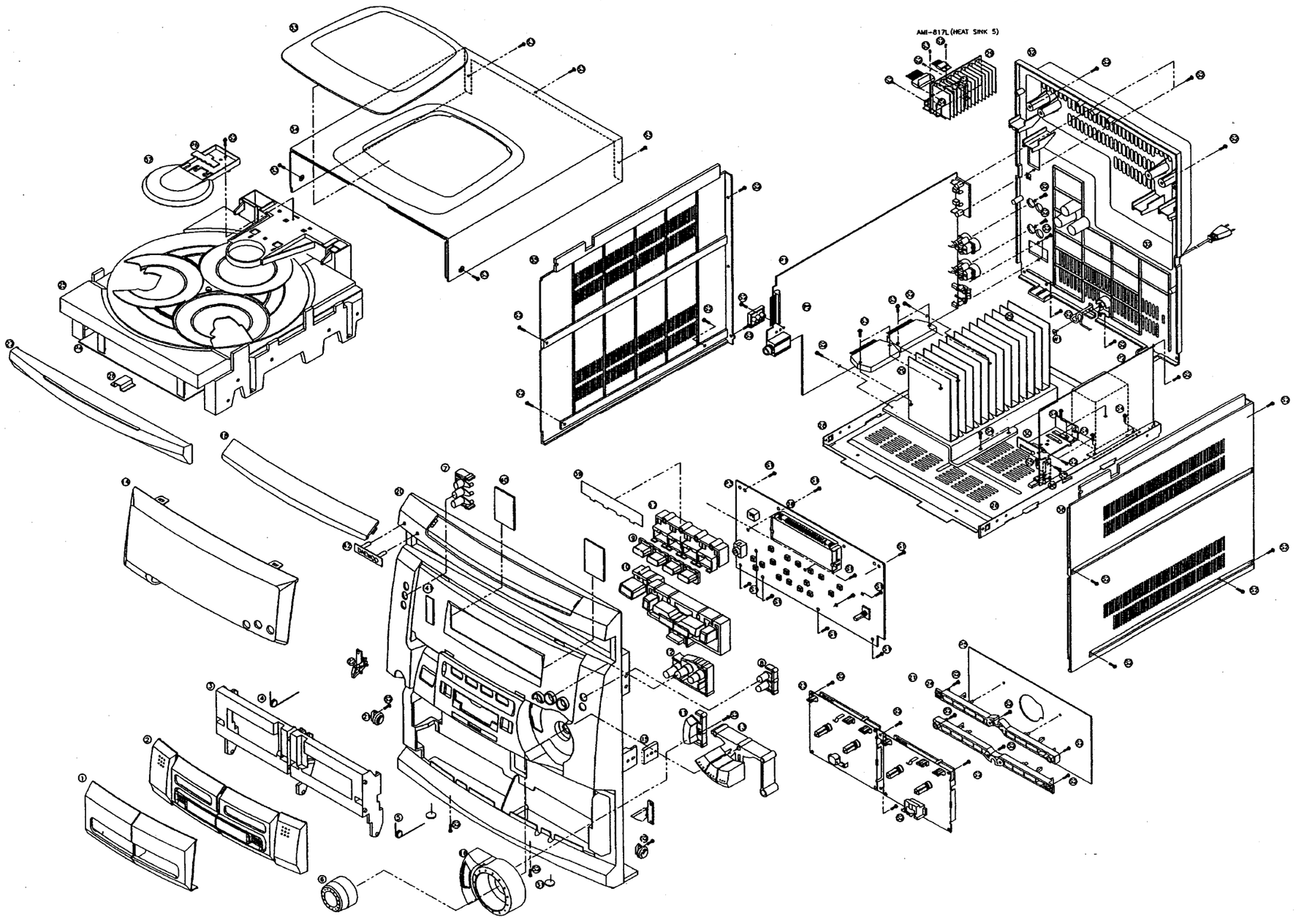


FIG. 4 : Tape Azimuth Adjust Circuit & Waveform

EXPLODED VIEW AND MECHANICAL PARTS LIST

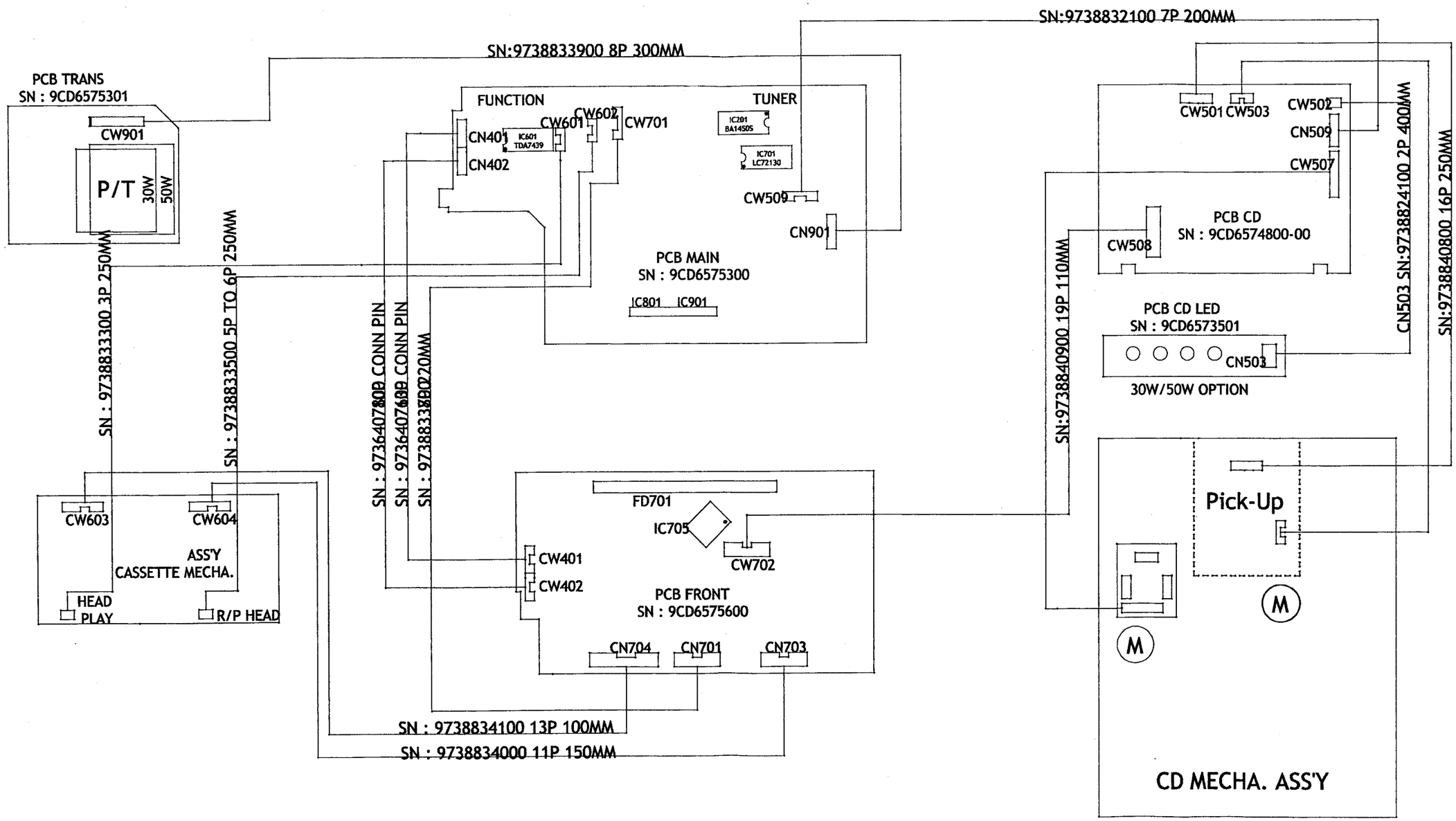


EXPLODED VIEW AND MECHANICAL PARTS LIST

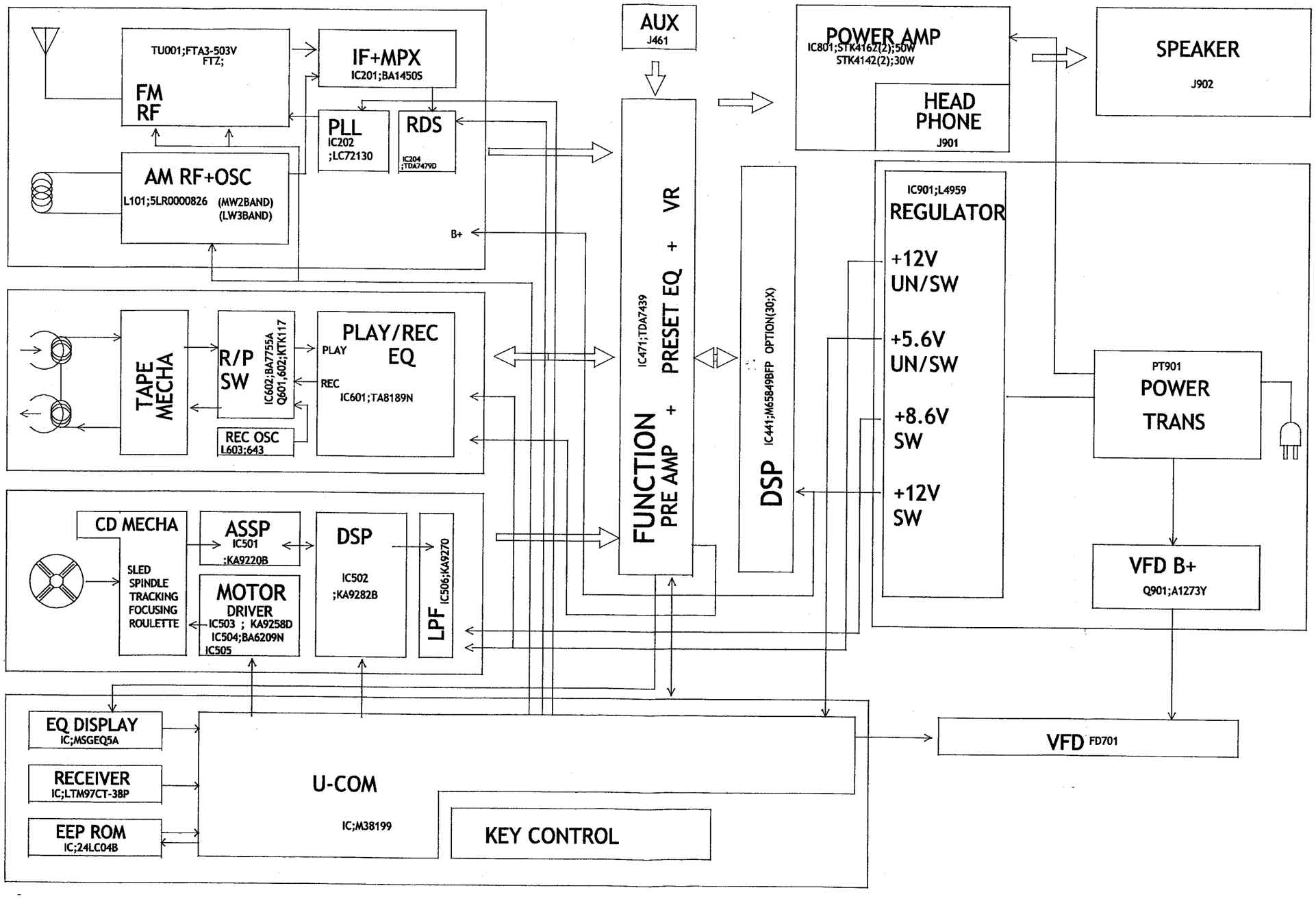
No.	Parts Name	Parts Code	Description	Qty
1	WINDOW DOOR A/B	9CD1613900	ACRYL	1
	WINDOW DOOR A/B	9CD1614000	ACRYL	1
2	COVER DOOR A/B	9CD0410200	MIPS	1
	COVER DOOR A/B	9CD0410300	MIPS	1
3	DOOR FRAME A/B	9CD1809400	ABS	1
	DOOR FRAME A/B	9CD1809500	ABS	1
4	SPRING DOOR EJECT L	9CD30078L0	SUS D0.8	1
5	SPRING DOOR EJECT R	9CD30078R0	SUS D0.8	1
6	KNOB VOLUME	9CD1334400	ABS	1
7	KNOB EQ	9CD1334600	ABS	1
8	KNOB OPEN	9CD1335900	ABS	1
9	KNOB FUNCTION	9CD1334300	ACRYL CLEAR	4
10	KNOB MODE	9CD1334900	ABS	1
11	KNOB SUPER	9CD1334500	ABS	1
12	KNOB DISC	9CD1334200	ACRYL MILKY	1
13	KNOB REC	9CD1334700	ABS	1
14	WINDOW FLT	9CD1613700	ACRYL	1
15	BRKT.SIDE	9CD2412900	ABS 1.5GR	2
16	DECO VR	9CD1002400	MIPS	1
17	COVER LED	9CD0409700	MIPS WHITE	1
18	WINDOW DECO	9CD1613800	ACRYL SMOG	1
19	GUIDE FLT	9CD2505600	AMI-817L	1
20	PANEL FRONT	9CD0305900	MIPS	1
21	DAMPER ASSY	9CDM029800	ABS/ACETAL	2
22	LOCKER ASSY	9CDM029900	ABS/ACETAL	2
23	CASS.DECK(A/S)	9CD6007000	S/S ADR-2138MW	1
	CASS.DECK(A/S)	9CD6006800	S/S ADR-2136SW	-
24	HOLDER PCB DECK	9CD2303600	MIPS 16.5GR(AMI-917L)	2
25	CD DECK MECHA.	9CD6006900	DCC-01B	1
26	HEAT SINK	9CD4402800	BSP 0.5T	1
27	DOOR CD	9CD1809300	MIPS	1
28	CHASSIS BOTTOM	9CD0607100	AMI-817L	1
29	HEAT SINK 1	9CD4404500	AL	-
	HEAT SINK 3	9CD4404600	AL	-
	HEAT SINK 5	9CD4404700	AL	1
	HEAT SINK 7	9CD4404300	AL	-
30	HEAT SINK P	9CD4404200	AL T2.0	-
31	CUSHION FOOT	9CD4207700	URETHAN FOAM RUBBER	2

No.	Parts Name	Parts Code	Description	Qty
32	COVER BACK	9CD0409801	MIPS	-
	COVER BACK	9CD0409803	MIPS	1
	COVER BACK	9CD0409804	MIPS	-
33	WINDOW TOP	9CD1612900	ACRYL SMOG	1
34	COVER TOP	9CD0409600	MIPS	-
	COVER TOP	9CD0409100	MIPS	1
35	COVER SIDE L	9CD0409200	MIPS	1
36	COVER SIDE R	9CD0409300	MIPS	1
37	DECO TOP	9CD1002200	ACRYL CLEAR	1
38	BRKT.PCB A	9CD2413100	SECC 1.0T	-
39	FILTER LED	9CD4700700	PC 0.15T	1
40	PLATE FLT	9CD0909800	PVC SHEET T1.0	-
41	PLATE FUNCTION	9CD0910000	PVC SHEET T0.5	1
42	BADGE DAEWOO	9CD1500900	ABS HOT STAMPING	1
43	BRKT.HEAT TR.	9CD2413900	SUS T0.4	-
44	HOLDER AC CORD	9CD2303300	ABS 4.0GR	1
P1	PCB MAIN	9CD6575300	AMI-817L	1
P2	PCB POWER	9CD6575000	AMI-917L	-
P3	PCB FRONT	9CD6575600	AMI-817L	1
P4	PCB CD	9CD6574800	AMI-817L	1
P5	PCB DECK	9CD6573400	AMI-917L	-
P6	PCB LED	9CD6574801	AMI-817L	1
S1	SCREW TAPTTITE	7173261011	TT2 BIN 2.6X10 MFZN	12
S2	SCREW TAPTTITE	7173301012	TT2 BIN 3.0X10 BK	37
S3	SCREW TAPTTITE	7173301212	TT2 BIN 3.0X12 BK	7
S4	SCREW TAPTTITE	7173400611	TT2 BIN 4X6 MFZN	8
S5	SCREW TAPTTITE	7173300611	TT2 BIN 3X6 MFZN	-
W1	WASHER SCREW	9CD3102400	TT2 BIN 3X10 + D14	2

WIRING DIAGRAM

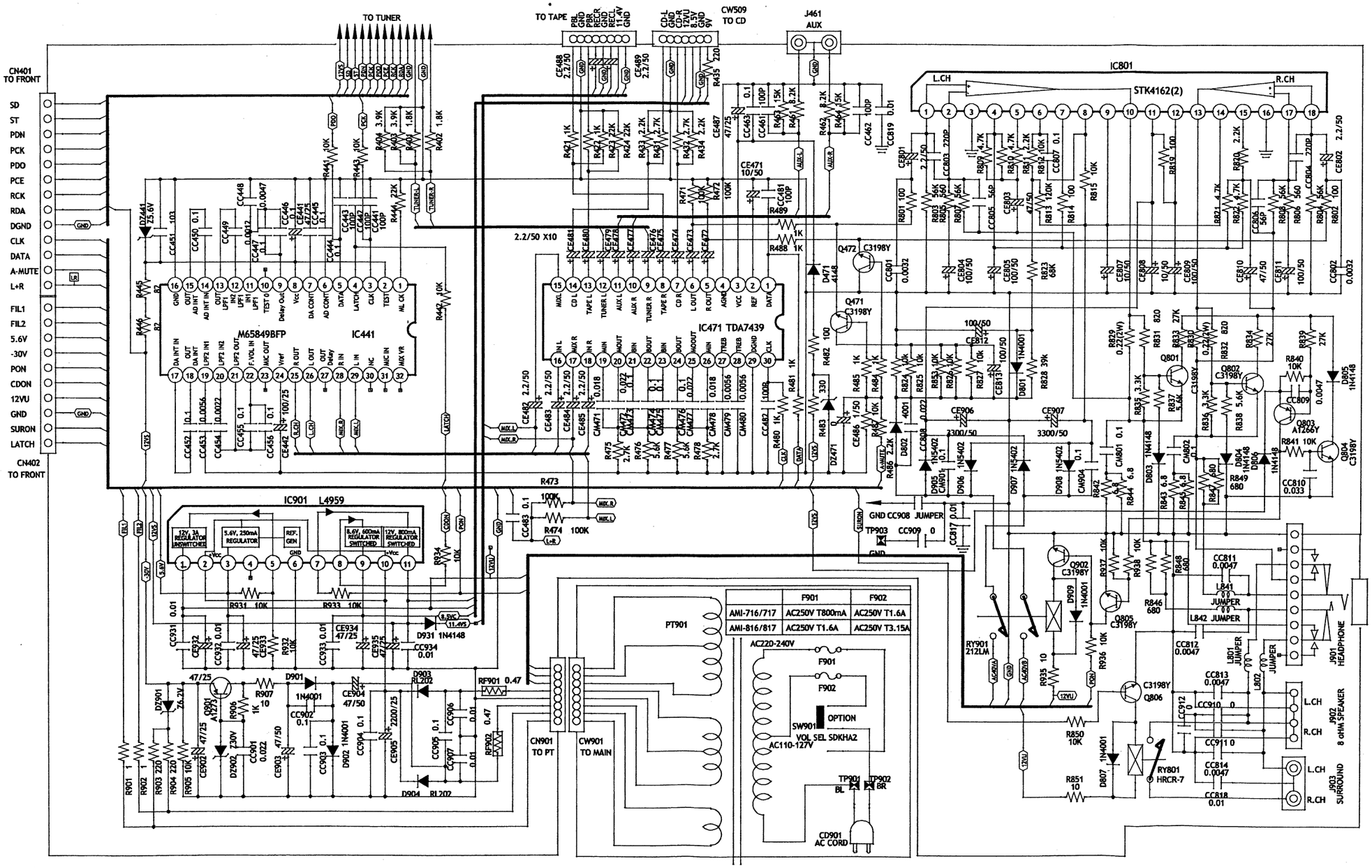


BLOCK DIAGRAM

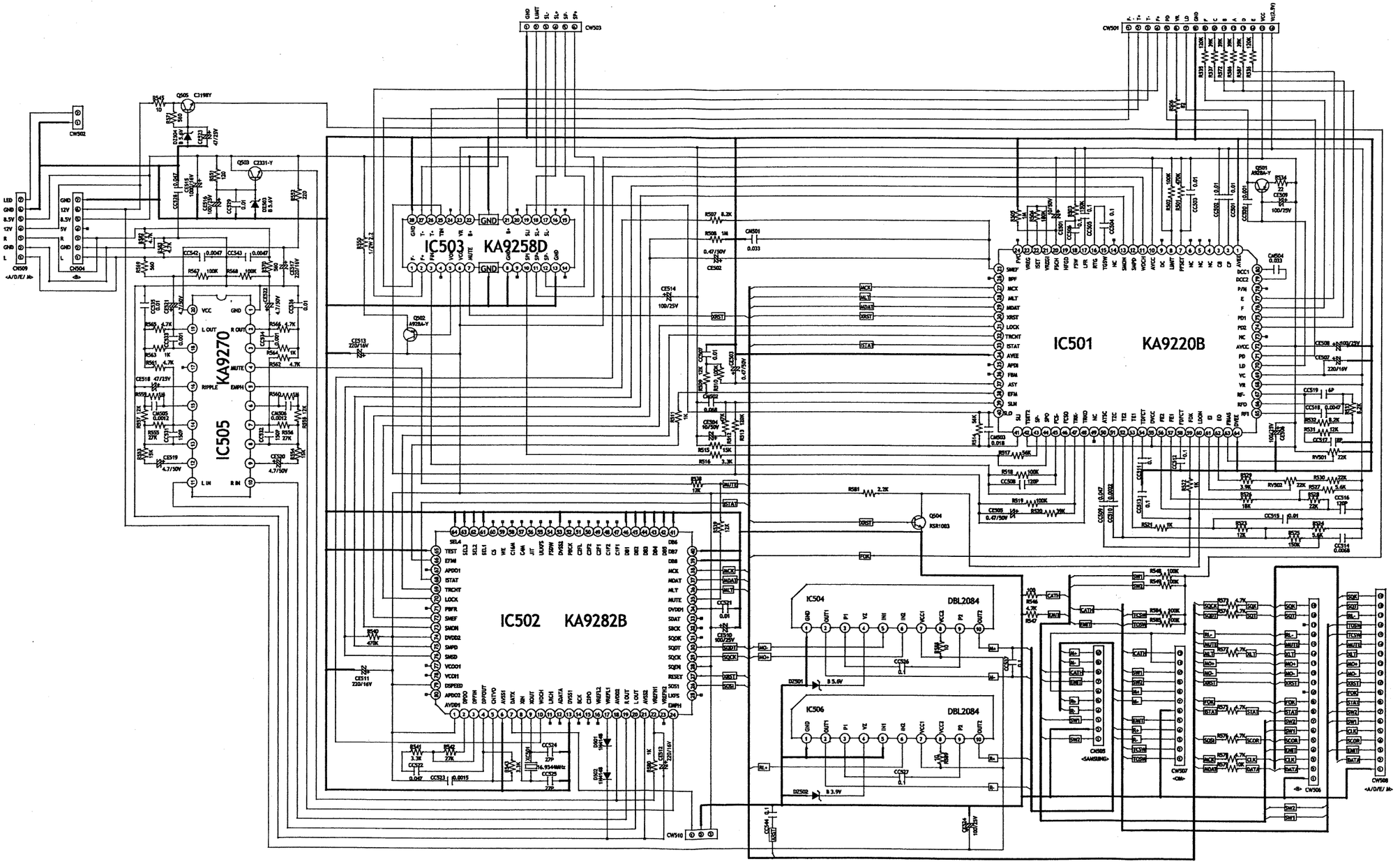


SCHEMATIC DIAGRAM

◆ POWER / AMP



◆ CD


IC501 KA9220B
IC502 KA9282B
IC503 KA9258D
IC504 DBL2084
IC505 KA9270
IC506 DBL2084
CW501
CW502
CW503
CW504
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CW508 <A/D/E/ M>
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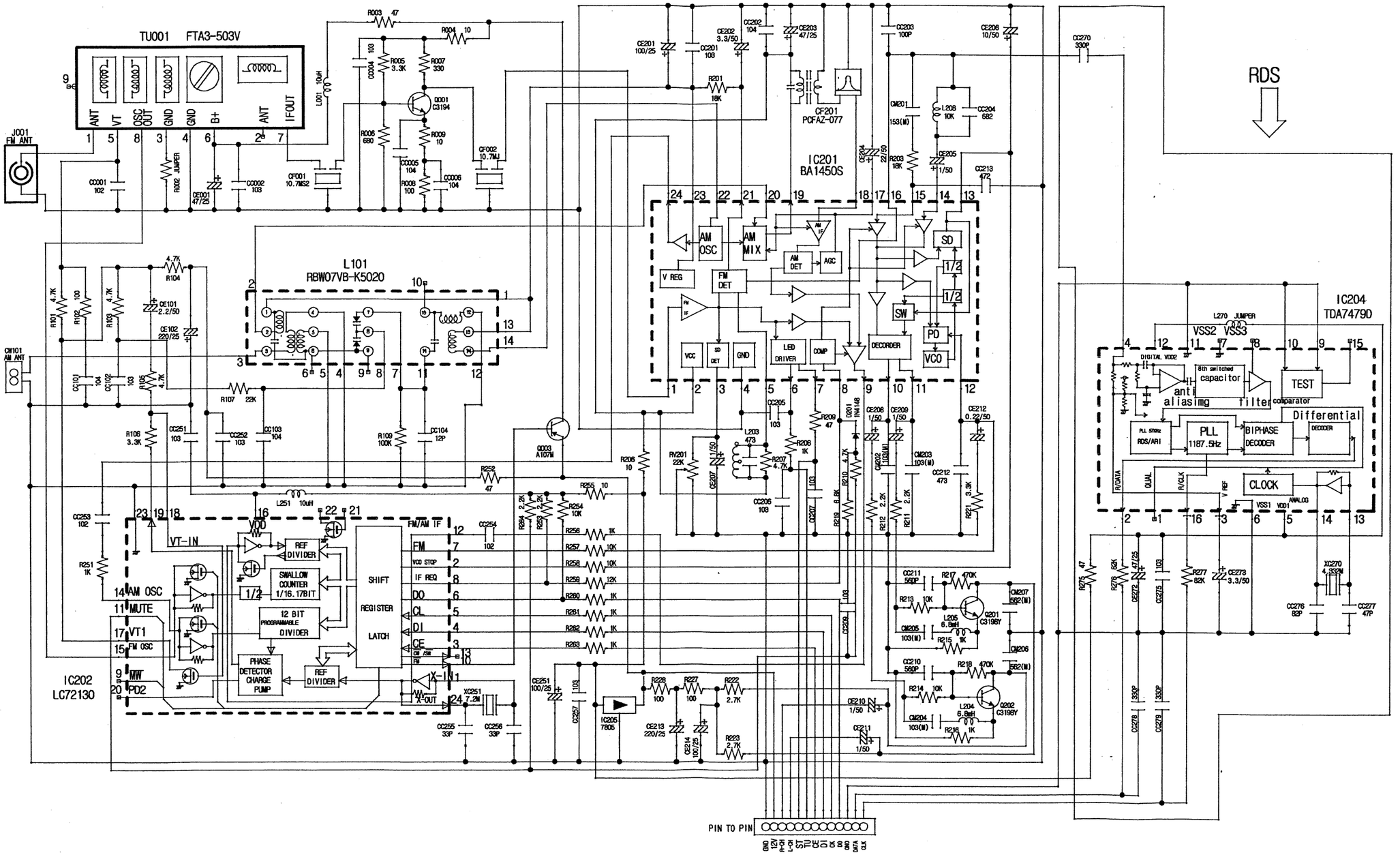
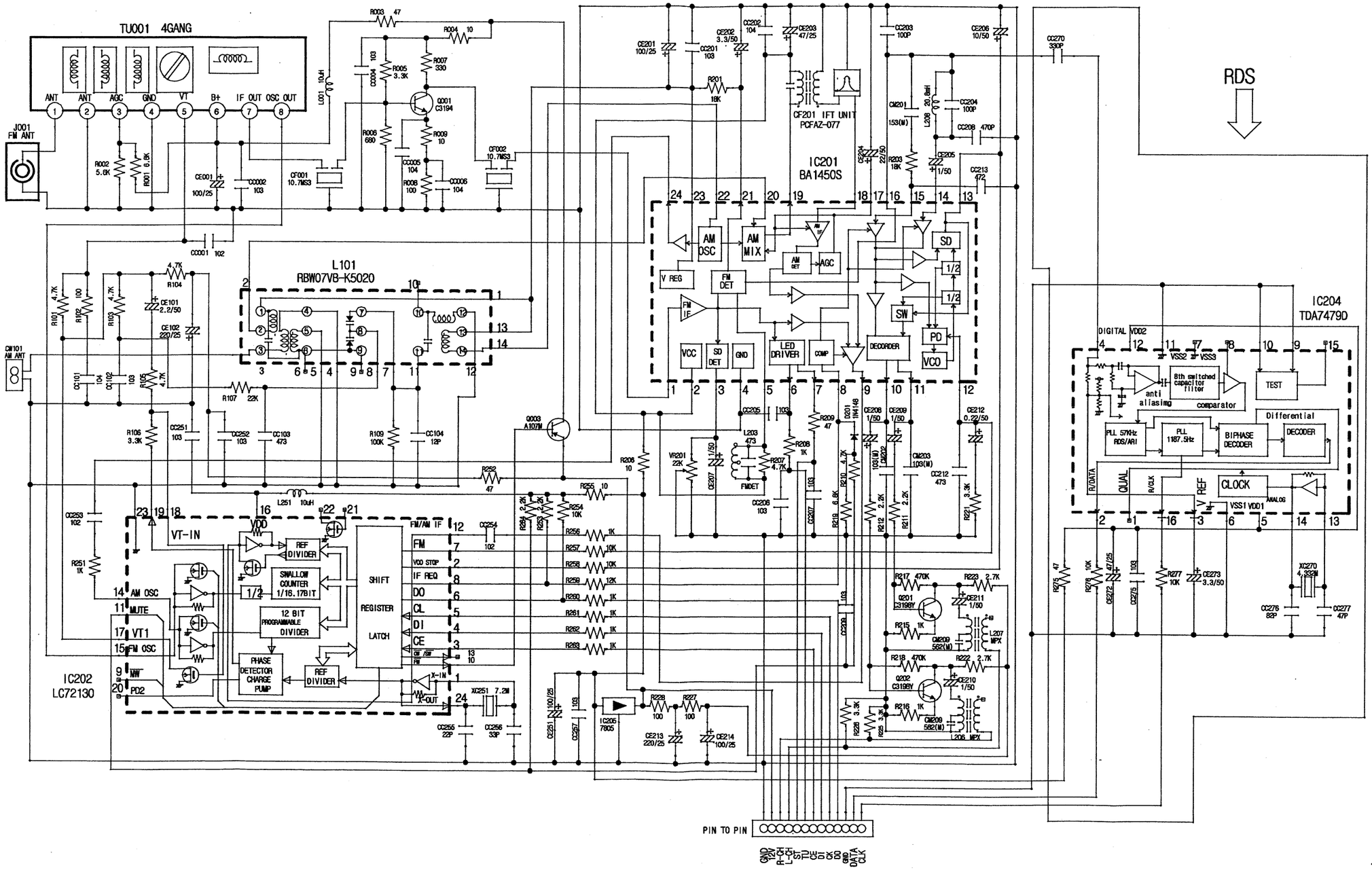
CW510
Q501 A928A-Y
Q502 A928A-Y
Q503 C2331-Y
Q504 RSR1003
Q505 C3198Y
D1501 B 5.6V
D2502 B 3.9V
16.9344MHz

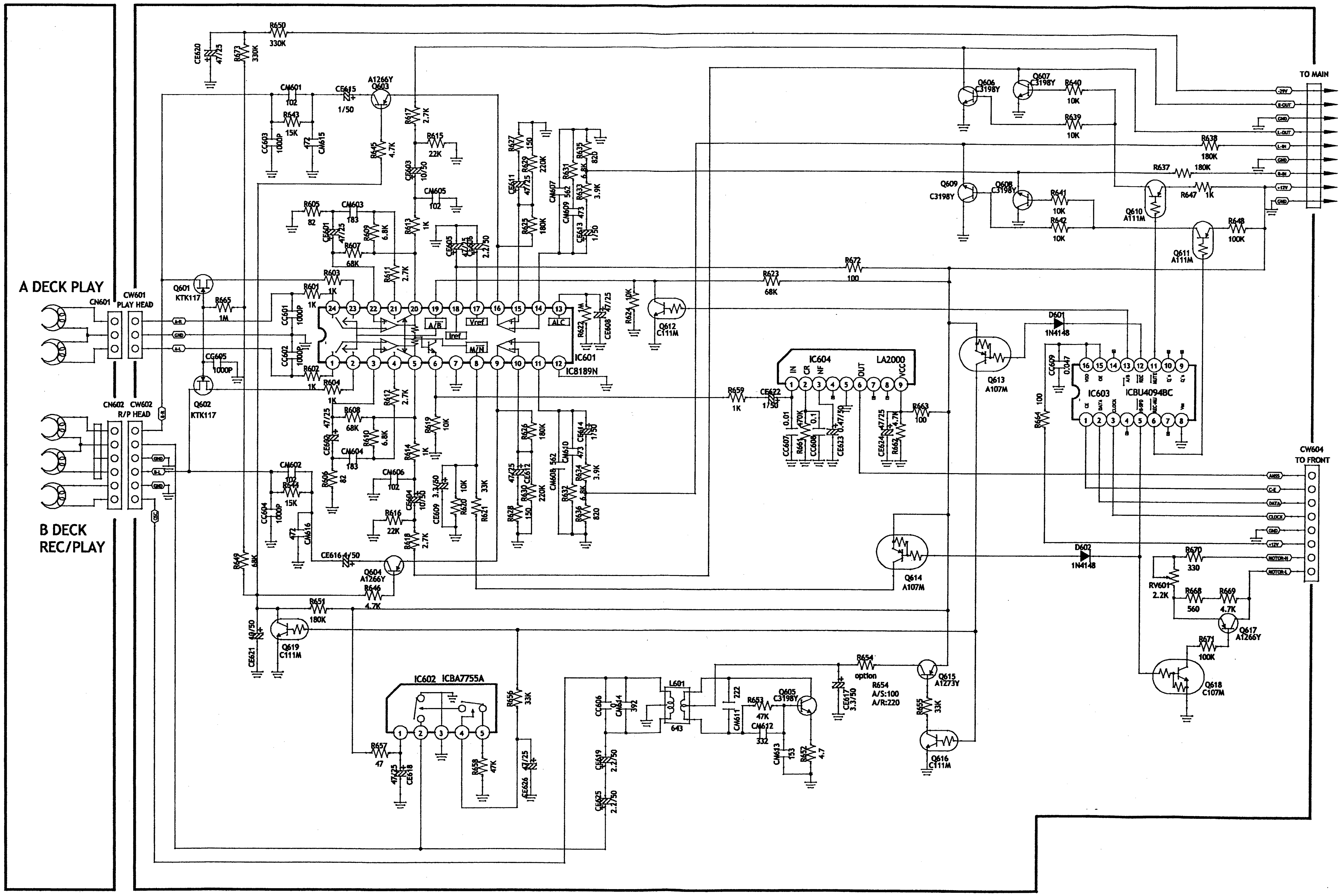
◆ TUNER


TU001 FTA3-503V
ANT
VT
OSC OUT
GND
GND
B+
ANT
IFOUT
J001 FM ANT
CH101 AM ANT
L101 RBW07VB-K5020
Q003 A1071M
Q001 C3194
CF001 10.7MS2
CF002 10.7MJ
L251 10uH
IC201 BA1450S
AM OSC
AM MIX
AM DET
AGC
V REG
FM DET
SD
1/2
SW
PD
VCO
DECORDER
LED DRIVER
COMP
VCC
SD DET
GND
CF201 PCFAZ-077
IC202 LC72130
VT-IN
REF DIVIDER
SWALLOW COUNTER 1/16.17BIT
12 BIT PROGRAMMABLE DIVIDER
PHASE DETECTOR CHARGE PUMP
SHIFT REGISTER LATCH
FM/AM IF
FM
VCO STOP
IF REQ
DO
CL
DI
CE
X-IN
X-OUT
AM OSC
MUTE
VT1
FM OSC
MW
PD2
IC205 7805
XC251 7.2M
IC204 TDA7479D
VSS2 VSS3
DIGITAL VDD2
8th switched capacitor
anti aliasimg filter
TEST
comparator
Differential
DECODER
PLL 57kHz RDS/ARI
PLL 1187.5Hz
BIPHASE DECODER
CLOCK
ANALOG
RV/DATA
QUAL
RV/CLK
REF
VSS1
VDD1
XC270 4.332M
RDS
PIN TO PIN
GND 12V A-CH L-CH STT TU CE CL DI DO GND DATA CLK

◆ TUNER-FTZ (OPTIONAL)

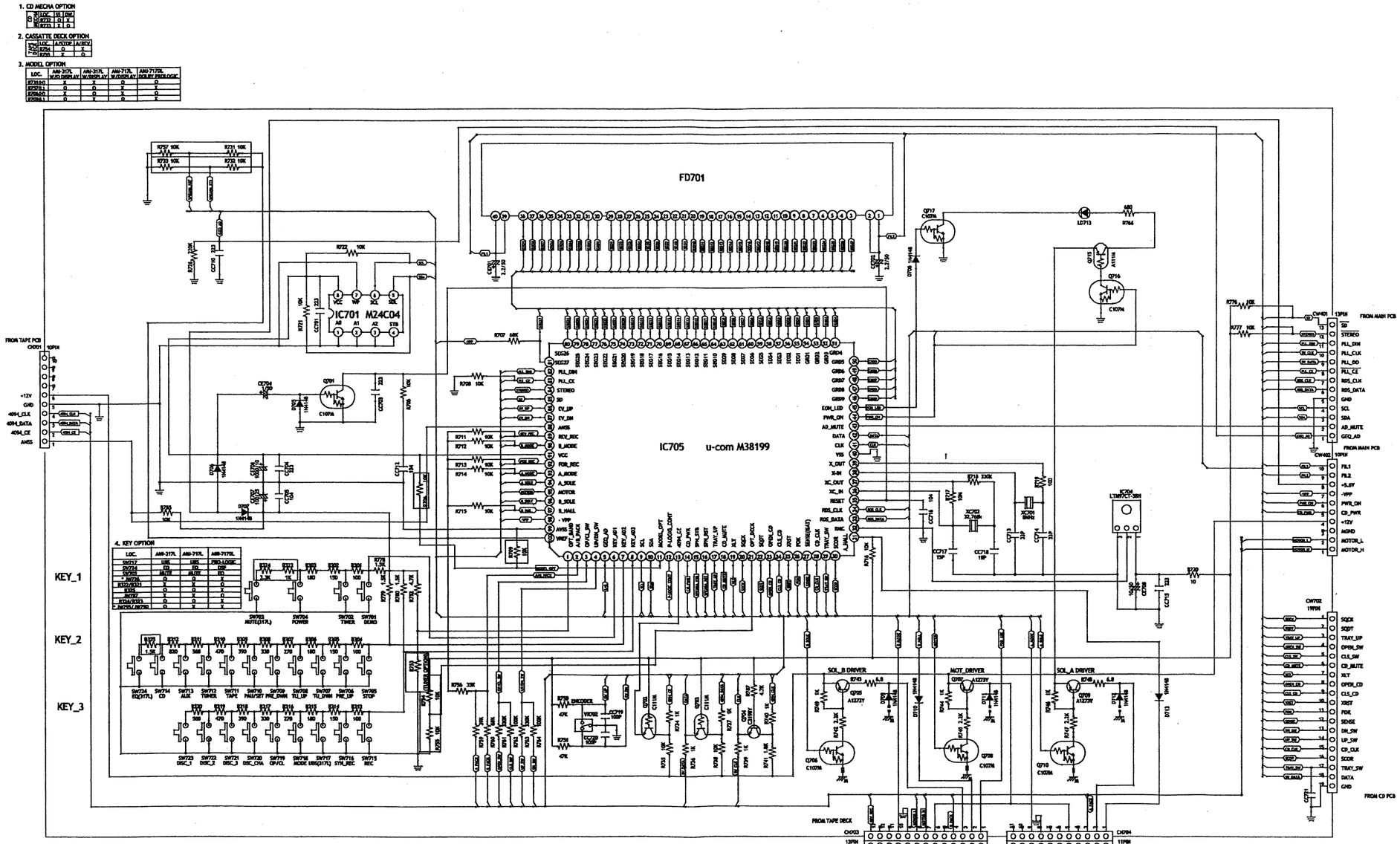


◆ TAPE



A DECK PLAY
CN601
CW601
PLAY HEAD
CN602
CW602
R/P HEAD
B DECK
REC/PLAY
Q601
KTK117
Q602
KTK117
R665
1M
CG605
1000P
CC601
1000P
CC602
1000P
R650
330K
CE620
47/25
R673
330K
CM601
102
CE615
1/50
A1266Y
Q603
R643
15K
CC603
1000P
472
CM615
R645
4.7K
R617
2.7K
R615
22K
CE603
10/50
CM605
102
R613
1K
R605
82
CM603
183
CE601
47/25
R609
6.8K
R607
68K
R611
2.7K
R603
1K
R601
1K
R602
1K
R604
1K
R608
68K
CE602
47/25
R610
6.8K
CM604
183
R606
82
R612
2.7K
R614
1K
R619
10K
CM606
102
CE604
10/50
R616
22K
R618
2.7K
CE609
3.3/50
R620
10K
R621
33K
CE605
47/25
CE606
2.2/50
R627
150
R629
220K
CE611
47/25
R625
180K
CM607
562
R631
6.8K
R635
820
R633
3.9K
CM609
473
CE613
1/50
R626
180K
R628
R630
150
CE612
47/25
220K
CM608
562
CM610
473
CE614
1/50
R632
6.8K
R634
3.9K
R636
820
A/B
Vref
Iref
ALC
M/N
IC601
IC8189N
R622
1M
CE608
47/25
R624
10K
Q612
C111M
R623
68K
R672
100
CM602
102
R644
15K
CC604
1000P
472
CM616
CE616 4/50
Q604
A1266Y
R646
4.7K
R649
68K
R651
180K
CE621
40/50
Q619
C111M
IC602 ICBA7755A
R657
47
47/25
CE618
R658
47K
R656
33K
47/25
CE626
IC604
LA2000
IN
CR
NF
OUT
VCC
R659
1K
CE622
1/50
CC607
0.01
R661
470K
CC608
0.1
CE623
0.47/50
CE624
47/25
R662
4.7K
R663
100
CC606
CM614
392
L601
643
CM611
222
R653
47K
CM612
332
CM613
153
Q605
C3198Y
R652
4.7
CE619
2.2/50
CE625
2.2/50
R654
option
CE617
3.3/50
R654
A/S:100
A/R:220
Q615
A1273Y
R655
33K
Q616
C111M
Q613
A107M
Q614
A107M
Q606
C3198Y
Q607
C3198Y
R640
10K
R639
10K
R638
180K
R637
180K
Q609
C3198Y
Q608
C3198Y
R641
10K
R642
10K
Q610
A111M
R647
1K
Q611
A111M
R648
100K
TO MAIN
-29V
R-OUT
GND
L-OUT
L-IN
GND
R-IN
+12V
GND
D601
1N4148
CC609
0.047
IC603
ICBU4094BC
VDD
OE
A/B
REC
MUTE
CE
DATA
CLOCK
Vss
R664
100
CW604
TO FRONT
AMSS
C-E
DATA
CLOCK
GND
+12V
MOTOR-H
MOTOR-L
D602
1N4148
R670
330
RV601
2.2K
R668
560
R669
4.7K
Q617
A1266Y
R671
100K
Q618
C107M

◆ CONTROL

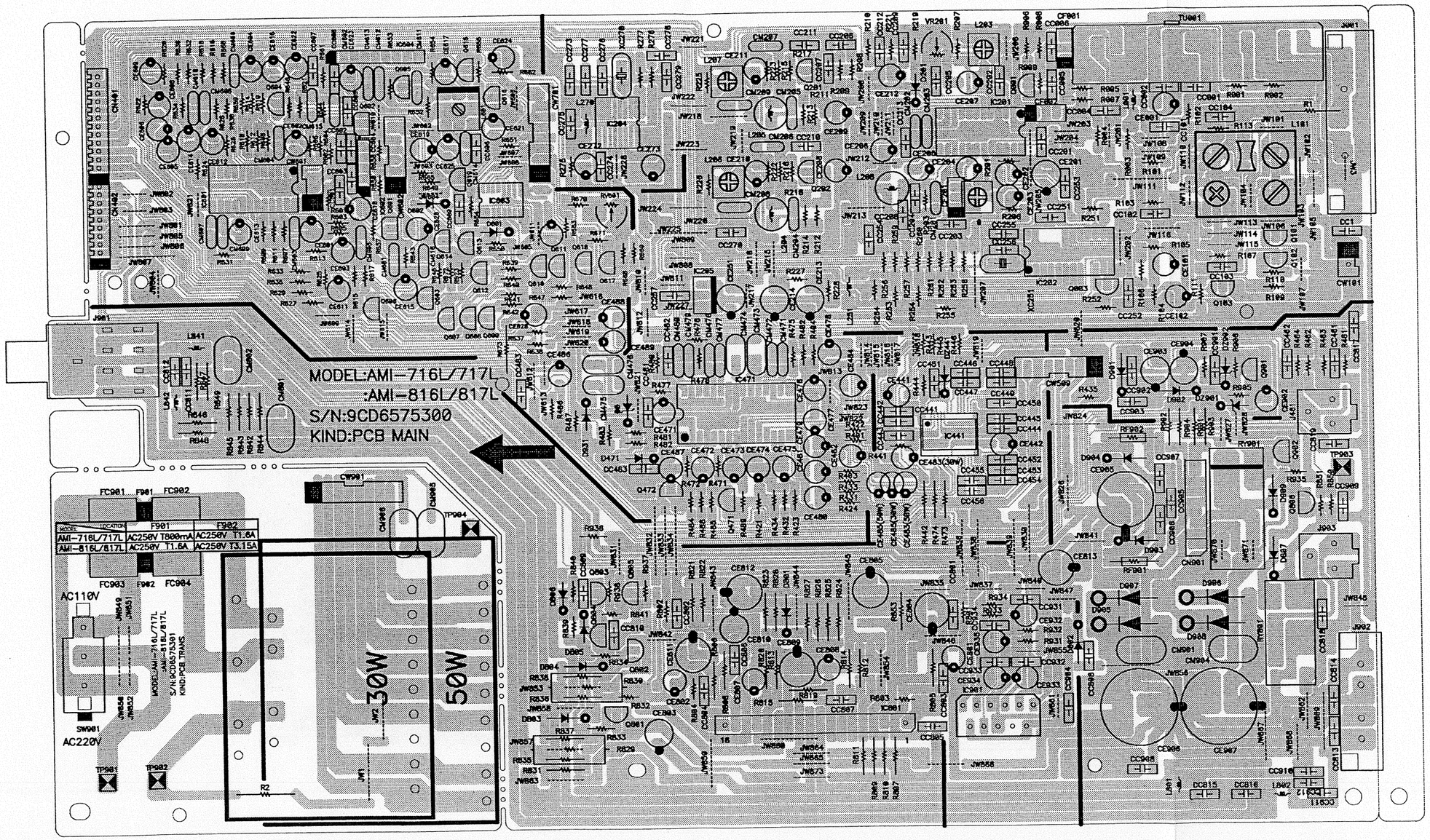


5. TUNER BAND OPTION LIST

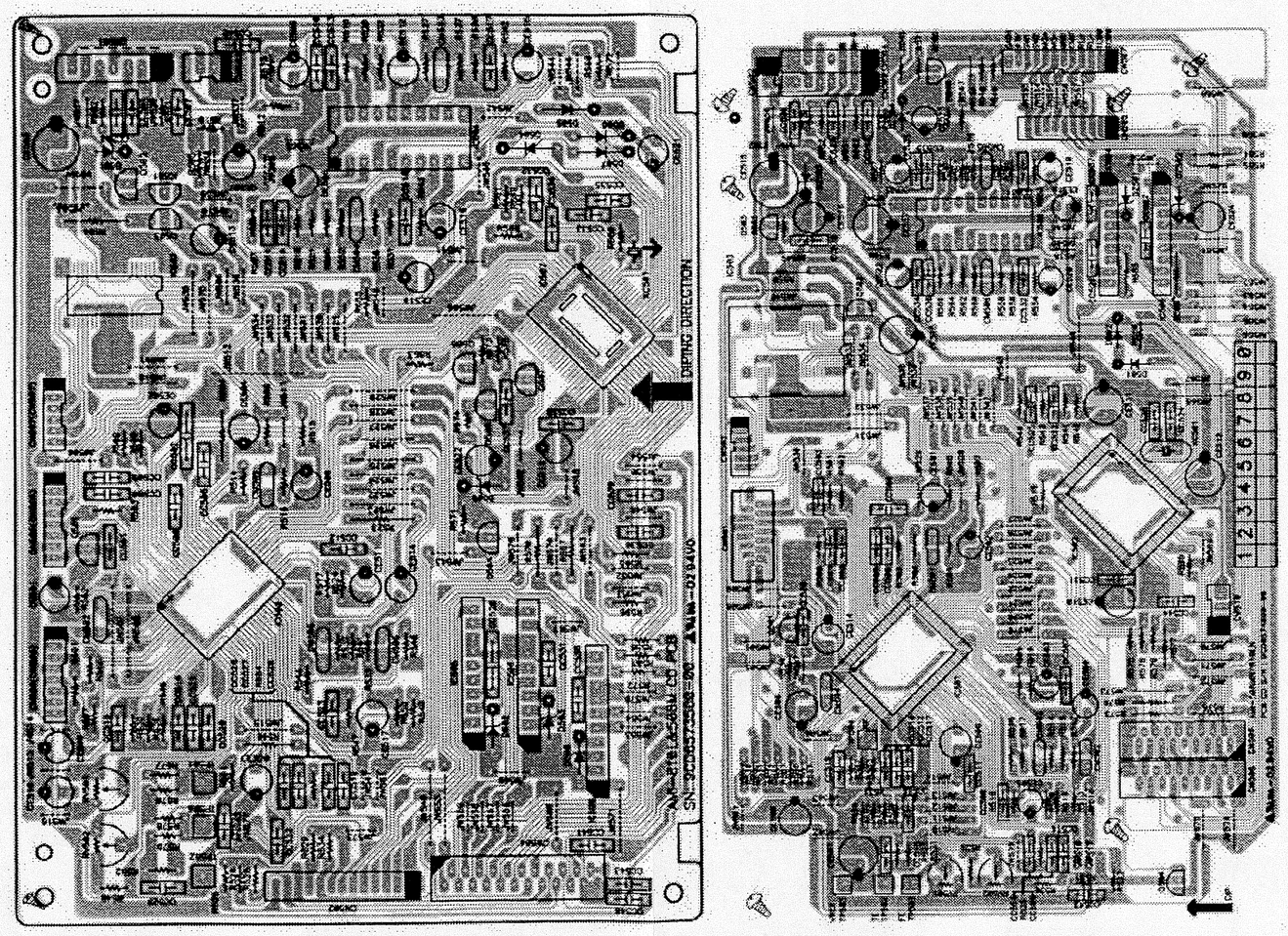
LOC.	AMERICA 1	AMERICA 2	EUROPE LW	EUROPE 2B	JAPAN	ASIA 1	ASIA 2	CIS	LATIN AMERI.	EUR RDS/LW	EUR RDS 2B
	FM : 87.5-108MHz AM : 530-1710KHz	FM : 87.5-108.1MHz AM : 530-1710KHz	FM : 87.5-108MHz AM : 522-1620KHz LW : 153-281KHz	FM : 87.5-108MHz AM : 522-1620KHz	FM : 76-108MHz AM : 522-1620KHz	FM : 87.5-108MHz AM : 522-1620KHz	FM : 87.5-108MHz AM : 522-1620KHz	FM L : 65-74MHz FM H : 87.5-108MHz AM : 522-1620KHz	FM : 87.5-108MHz AM : 530-1620KHz	FM : 87.5-108MHz AM : 522-1620KHz LW : 153-281KHz	FM : 87.5-108MHz AM : 522-1620KHz
R753	JUMPER	330	680	1.2K	1.8K	2.7K	3.9K	6.8K	10K	15K	22K

PCB PATTERN LAYOUT

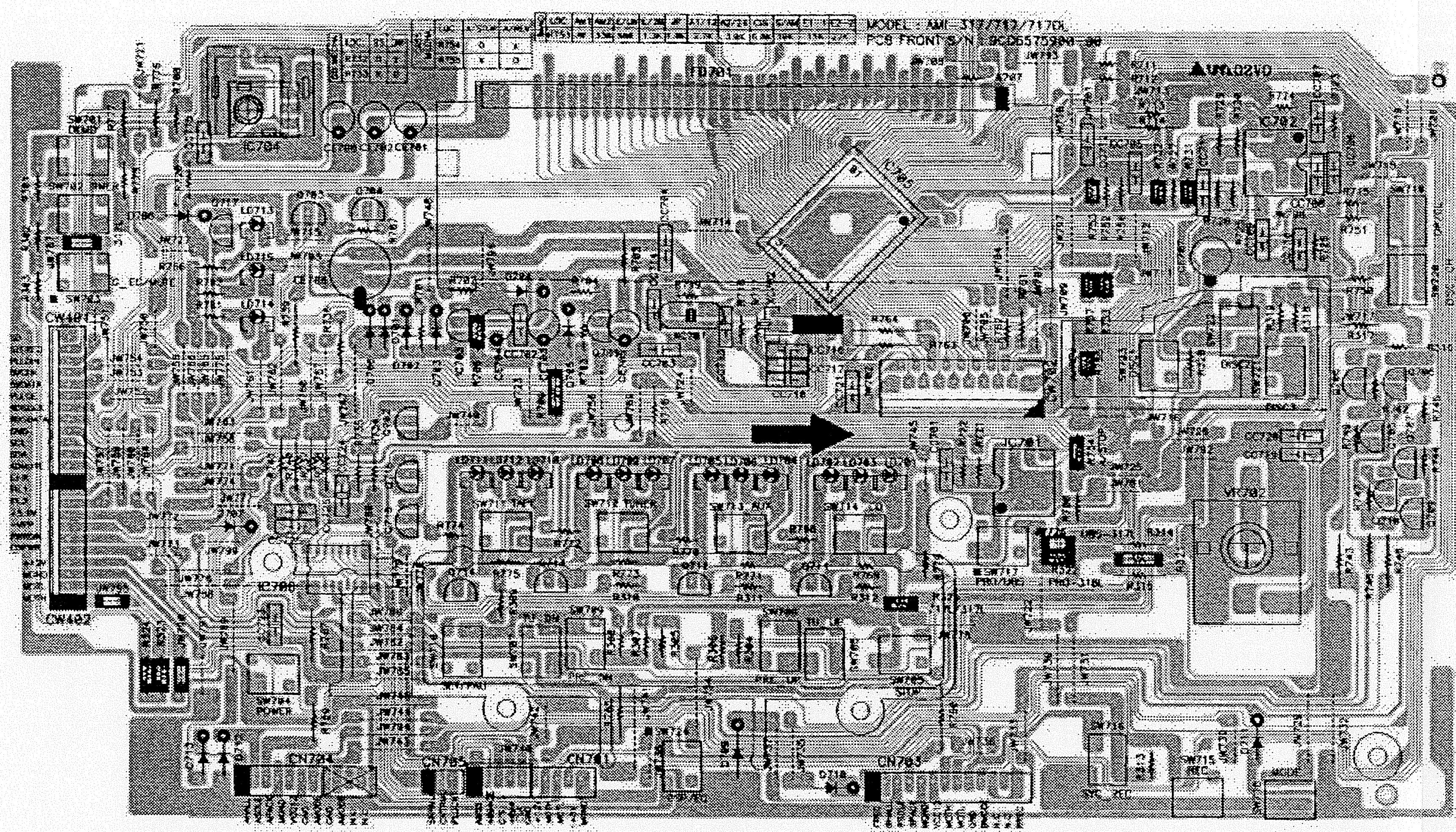
MAIN



CD



CONTROL



QUEL-08964 / DRUCK 13

ELECTRICAL PARTS LIST

No	Parts Name	Parts Code	Description	Qty	Location
1	AM RF UNIT	5LR0000826	RBW07VB-K5020	1	L101
2	ANT AM LOOP	5LA180K828	LOOP-7	1	AT101
3	ANTENNA FM	9736806000	2M T-ANT	1	AT102
4	C CERA	CCXB1H101K	50V B 100PF K (TAPPING)	1	CC203
5	C CERA	CCXB1H102K	50V B 1000PF K (TAPPING)	4	CC001 CC253 CC254 CC605
6	C CERA	CCXB1H122K	50V B 1200PF K (TAPPING)	-	CC449
7	C CERA	CCXB1H221K	50V B 220PF K (TAPPING)	1	CC711 [CC803 CC804]
8	C CERA	CCXB1H222K	50V B 2200PF K (TAPPING)	-	CC454
9	C CERA	CCXB1H331K	50V B 330PF K (TAPPING)	5	[CC270 CC278 CC279] CM607 CM608
10	C CERA	CCXB1H332K	50V B 3300PF K (TAPPING)	2	CC801 CC802
11	C CERA	CCXB1H471K	50V B 470PF K (TAPPING)	-	CC803 CC804
12	C CERA	CCXB1H472K	50V B 4700PF K (TAPPING)	6	CC213 [CC448] CC809 CC811 CC812 [CC813 CC814]
13	C CERA	CCXB1H561K	50V B 560PF K (TAPPING)	2	CC210 CC211
14	C CERA	CCXB1H562K	50V B 5600PF K (TAPPING)	-	CC453
15	C CERA	CCXB1H681K	50V B 680PF K (TAPPING)	2	CM601 CM602
16	C CERA	CCXB1H682K	50V B 6800PF K (TAPPING)	1	CC204
17	C CERA	CCXB1H821K	50V B 820PF K (TAPPING)	4	CC601 CC602 CC603 CC604
18	C CERA	CCXF1H103Z	50V F 0.01MF Z (TAPPING)	29	CC002 CC004 CC102 CC201 CC205 CC206 CC207 CC209 CC251 CC252 [CC257 CC275/CC818] [CC451] CC501 CC502 CC503 CC507 CC515 CC521 CC529 CC535 CC536 CC607 CC817 CC906 CC907 CC931 CC932 CC933 CC934
19	C CERA	CCXF1H104Z	50V F 0.1MF Z	29	CC005 CC006 CC101 CC103 CC202 [CC444 CC445 CC446 CC447 CC450 CC452 CC455 CC456] CC463 CC483 CC504 CC505 CC506 CC511 CC512 CC513 CC526 CC527 CC537 CC544 CC608 [CC703] CC705 CC708 [CC709]
20	C CERA	CCXF1H223Z	50V F 0.022MF Z (TAPPING)	7	CC701 [CC703] CC704 CC707 CC709 CC715 CC722 CC808 CC901
21	C CERA	CCXF1H333Z	50V F 0.033MF Z (TAPPING)	1	CC810
22	C CERA	CCXF1H473Z	50V F 0.047MF Z (TAPPING)	5	CC212 CC509 CC522 CC528 CC609
23	C CERA	CCZB1E102K	25V B 1000PF K (AXIAL)	3	CC520 CC533 CC534
24	C CERA	CCZB1E151K	25V B 150PF K (AXIAL)	2	CC531 CC532
25	C CERA	CCZB1E152K	25V B 1500PF K (AXIAL)	1	CC523
26	C CERA	CCZB1E222K	25V B 2200PF K (AXIAL)	2	CC510 CC516
27	C CERA	CCZB1E391K	25V B 390PF K (AXIAL)	1	CC508
28	C CERA	CCZB1E472K	25V B 4700PF K (AXIAL)	3	CC518 CC542 CC543
29	C CERA	CCZB1E682K	25V B 6800PF K (AXIAL)	1	CC514
30	C CERA	CXCH1H101J	50V CH 100PF J (TAPPING)	10	[CC441 CC442 CC443] CC461 CC462 CC481 CC482 CC710 CC719 CC720 CC724 CC725 CC726
31	C CERA	CXCH1H120J	50V CH 12PF J (TAPPING)	1	CC104
32	C CERA	CXCH1H150J	50V CH 15PF J (TAPPING)	2	[CC711] CC717
33	C CERA	CXCH1H180J	50V CH 18PF J (TAPPING)	1	CC718
34	C CERA	CXCH1H330J	50V CH 33PF J (TAPPING)	5	CC255 CC256 CC706 CC713 CC714

ELECTRICAL PARTS LIST

No	Parts Name	Parts Code	Description	Qty	Location
35	C CERA	CXCH1H470J	50V CH 47PF J (TAPPING)	1	CC277
36	C CERA	CXCH1H560J	50V CH 56PF J (TAPPING)	2	CC805 CC806
37	C CERA	CXCH1H820J	50V CH 82PF J (TAPPING)	1	CC276
38	C CERA	CZCH1E609K	CH 25V 6PF K AXIAL	1	CC519
39	C CERA	CZCH1E809K	CH 25V 8PF K AXL 52MM	1	CC517
40	C CERA	CZCH1H270J	CH 50V 27PF J AXL 52MM	2	CC524 CC525
41	C ELECTRO	CEXE1C102A	16V RS 1000MF 13X20	1	CE515
42	C ELECTRO	CEXF1A102V	10V RSS 1000MF (10X16) TP	1	CE706
43	C ELECTRO	CEXF1C221V	16V RSS 220MF (8X11.5) TP	5	CE507 CE511 CE512 CE513 CE517
44	C ELECTRO	CEXF1E101V	25V RSS 100MF (6.3X11) TP	10	CE201 CE214 CE251 [CE442] CE506 CE508 CE509 CE510 CE514 CE516 CE524 [CE707]
45	C ELECTRO	CEXF1E221V	25V RSS 220MF (8X11.5) TP	2	CE102 CE213
46	C ELECTRO	CEXF1E470V	25V RSS 47MF (5X11) TP	21	CE001 CE203 [CE272][CE441] CE487 CE518 CE523 CE601 CE602 CE605 CE608 CE611 CE612 CE618 CE620 CE624 CE626 CE902 CE932 CE933 CE934 CE935
47	C ELECTRO	CEXF1H100V	50V RSS 10MF (5X11) TP	10	CE206 CE471 CE501 CE504 CE603 CE604 CE621 CE708 CE807 CE808
48	C ELECTRO	CEXF1H101V	50V RSS 100MF (8X11.5) TP	7	[CE707] CE804 CE805 CE809 CE811 CE812 CE813
49	C ELECTRO	CEXF1H109V	50V RSS 1MF (5X11) TP	13	CE205 CE207 CE208 CE209 CE210 CE211 CE486 CE613 CE614 CE615 CE616 CE622 [CE704] [CE709]
50	C ELECTRO	CEXF1H220V	50V RSS 22MF (5X11) TP	1	CE204
51	C ELECTRO	CEXF1H228V	50V RSS 0.22MF (5X11) TP	1	CE212
52	C ELECTRO	CEXF1H229V	50V RSS 2.2MF (5X11) TP	24	CE101 CE472 CE473 CE474 CE475 CE476 CE477 CE478 CE479 CE480 CE481 CE482 CE483 CE484 CE485 CE488 CE489 CE606 CE619 CE625 CE701 CE702 CE801 CE802
53	C ELECTRO	CEXF1H339V	50V RSS 3.3MF (5X11) TP	4	CE202 [CE273] CE609 CE617
54	C ELECTRO	CEXF1H470V	50V RSS 47MF (6.3X11) TP	4	CE803 CE810 CE903 CE904
55	C ELECTRO	CEXF1H478V	50V RSS 0.47MF (5X11) TP	4	CE502 CE503 CE505 CE623
56	C ELECTRO	CEXF1H479V	50V RSS 4.7MF (5X11) TP	4	CE519 CE520 CE521 CE522
57	C ELECTRO	CEYF1E222V	25V RSS 2200MF (16X25)	1	CE905
58	C ELECTRO	CEYF1H332V	50V RSS 3300MF	2	CE906 CE907
59	C MYLAR	CMXM1H102J	50V 0.001MF J (TP)	2	CM605 CM606
60	C MYLAR	CMXM1H103J	50V 0.01MF J (TP)	4	CM202 CM203 CM204 CM205
61	C MYLAR	CMXM1H104J	50V 0.1MF J	8	CM473 CM474 CM475 CM476 CM801 CM802 CM901 CM904
62	C MYLAR	CMXM1H122J	50V 0.0012MF J	2	CM505 CM506
63	C MYLAR	CMXM1H153J	50V 0.015MF J (TP)	1	CM201
64	C MYLAR	CMXM1H183J	50V 0.018MF J	3	CM471 CM478 CM503
65	C MYLAR	CMXM1H223J	50V 0.022MF J	5	CM472 CM477 CM603 CM604 CM613
66	C MYLAR	CMXM1H332J	50V 3300 PF J	2	CM611 CM612
67	C MYLAR	CMXM1H333J	50V 0.033MF J (TP)	2	CM501 CM504
68	C MYLAR	CMXM1H472J	50V 0.0047MF J	3	CM614 CM615 CM616

No	Parts Name	Parts Code	Description	Qty	Location
69	C MYLAR	CMXM1H473J	50V 0.047MF J	2	[CC813 CC814] CM609 CM610
70	C MYLAR	CMXM1H562J	50V 5600 PF J	4	CM206 CM207 CM479 CM480
71	C MYLAR	CMXM1H683J	50V 0.068 MF J	1	CM502
72	CLIP FUSE	9734600700	FC-5N	2	FC901 FC902
73	COIL BIAS OSC	5L0503K643	SM-10F 5.04MH	1	L601
74	COIL CHOKE	5LC682K822	6.8MH	2	L204 L205
75	COIL DESCRIMINA-TOR	5107FBK473	7X7 BLK KSZ-73S	1	L203
76	COIL PEAKING	5CPZ100K02	10UH K (AXIAL 3.5MM)	2	L001 L251
77	CONN AS	9736407600	PIN BASE 53095-1310 13P	1	CN401
78	CONN AS	9738824100	2P UL2468 400MM	1	CN503
79	CONN AS	9738832100	7P 200 P=2.5 BOARDIN	1	CN509 CW509
80	CONN AS	9738833300	UL2851 #28 3P SHIELD 250M	1	CN601 CW601
81	CONN AS	9738833500	#28 6P SHIELD 250MM	1	CN602 CW602
82	CONN AS	9738833700	#26 8P FLAT 220MM	1	CN701 CW701
83	CONN AS	9738833900	#22 8P BOARD-IN 300MM	1	CN901 CW901
84	CONN AS	9738834000	#26 2.0PITCH 11P FLAT 150	1	[CN703] CN704
85	CONN AS	9738834100	#26 13P FLAT 100MM	1	CN703 [CN704]
86	CONN AS	9738840800	FFC 16P P1.0X250MM R	1	CN501
87	CONN AS	9738840900	FFC 19P P1.25X110MM K	1	CN508
88	CONN PIN	9736407800	53095-1010 10PIN ANGLE	1	CN402
89	CONN WAFER	9736407900	52084-1010 10P BOTTOM	1	CW402
90	CONN WAFER	9736408300	52492-1920 19P BOTTOM	1	CW702
91	CONN WAFER	9736408400	52045-1945 19P	1	CW508
92	CONN WAFER	9CD6258800	2P S2B-XH-A	1	CW101
93	CONN WAFER	9CD6259300	52807-1610	1	CW501
94	CONN WAFER	9CD6259400	2001-WS-12P	1	CW507
95	CONN WAFER	9CD6259500	2001-WS-6P	1	CW503
96	CONN WAFER	9CD6259600	2503-WS-2P	1	CW502
97	CORD AC	9736900200	KKP419C,KLCE-2F,0.75SQURE	1	CD901
98	CRYSTAL QUARTZ	5XA32R768-	DT-38 32.768KHZ 20PPM	1	XC702
99	DIODE	D1N4001-	1N4001	5	D801 D802 [D807] D901 D902 D909
100	DIODE	D1N5402-	1N5402	4	D905 D906 D907 D908
101	DIODE	DRL202--	RL202	2	D903 D904
102	DIODE	DZN4148-	1N4148 AUTO 52MM	20	D201 D471 D501 D502 D601 D602 D705 D706 D707 [D708] D709 D710 D711 D712 D713 D803 D804 D805 D806 D931
103	DIODE ZENER	DKTZ30A-	MTZ 30A	1	DZ902
104	DIODE ZENER	DZTZ3R9B--	MTZ3.9B	1	DZ502
105	DIODE ZENER	DZTZ5R1B--	MTZ-5.1V B 0.5W (AUTO)	-	DZ441
106	DIODE ZENER	DZTZ5R6B--	UZ-5.6B	3	DZ501 DZ503 DZ504
107	DIODE ZENER	DZTZ6R2A--	MTZ-6.2 52MM TAPPING	1	DZ901
108	FET	TZTK117Y--	KTK117(Y) AUTO	2	Q601 Q602
109	FILTER	5PPCFAZ077	PCFAZ077	1	CF201
110	FILTER CERA	5PE107MJA-	SFE 10.7MHZ RED	1	CF002

ELECTRICAL PARTS LIST

No	Parts Name	Parts Code	Description	Qty	Location
111	FILTER CERA	5PE107MS2A	SFE107MS2-A	1	CF001
112	FUSE GLASS TUBE	5FSGB1622L	SEMKO TL 1.6A 250V MF51	1	F901
113	IC	1BA1450S--	BA1450S	1	IC201
114	IC	1BU4094BCF	BU4094BCF(SOP16)	2	IC603 IC706 [IC707]
115	IC	1DBL2084--	DBL2084(D/W)	2	IC504 IC506
116	IC	1L4959--	L4959	1	IC901
117	IC	1LC72130--	LC72130	1	IC202
118	IC	1M24C04-	M24C04-BN6	1	IC701
119	IC	1M38199316	U-COM M38199	1	IC705
120	IC	1M65849BFP	M65849BFP(DIP32)	-	IC441
121	IC	1MC7805-	MC 7805 (KA7805)	1	IC205
122	IC	1MSGEQ5A--	MSGEQ5A	1	IC702
123	IC	1STK41622-	STK4162-2	1	IC801
124	IC	1TA8189N--	TA8189N	1	IC601
125	IC	1TDA7479D-	TDA7479D	1	IC204
126	IC AMSS	1LA2000-	LA2000	1	IC604
127	IC AUDIO	1KA9270-	KA9270	1	IC505
128	IC AUDIO	1TDA7439--	TDA7439	1	IC471
129	IC AUDIO DSP	1KA9282B--	KA9282B	1	IC502
130	IC CHIP	1KA9258D--	KA9258D	1	IC503
131	IC CHIP RF	1KA9220B--	KA9220B	1	IC501
132	IC MICOM	1M38199917	M38199917	1	IC705
133	IC PRE AMP	1TM97CT38P	LTM97CT-38P	1	IC704
134	IC SWITCHING	1BA7755A--	BA7755A (HEAD SW)	1	IC602
135	JACK ANTENNA	9736322200	T-646	1	J001
136	JACK HEADPHONE	9766319501	HTJ-064-05B GOLD	1	J901
137	JACK RCA	9CD6313700	S-436P	1	J461 [J903]
138	JACK SPEAKER	9736320500	CJ-9007-040	1	J902
139	LED	DLTL16KEE-	LTL-16KEE(RED)PI3.1	4	LD703 LD706 LD709 LD712
140	LED	DLTL16KGE-	LTL-16KGE(GREEN)PI3.1	8	LD701 LD702 LD704 LD705 LD707 LD708 LD710 LD711
141	LED	DLTL307EE-	LTL-307EE(RED)PI5	1	[LD713] [LD716 LD717]
142	LED	DLTL307GE-	LTL-307GE(GREEN)PI5	-	LD713 LD714 LD715
143	LED	DLTL87HEE-	LTL-87HEE(RED)PI3	2	LD510 LD512
144	LED	DLTL87HGE-	LTL-87HGE(GREEN)PI3	2	LD511 LD513
145	PIN WAFER	9736407700	52084-1310 13P BOTTOM	1	CW401
146	PIN WRAPPING	9713550400	1.0X2.5X15	6	TP501 TP502 TP503 TP504 TP901 TP902
147	R CARBON FILM	RD-2Y229J-	1/2 2.2 OHM J	1	R550
148	R CARBON FILM	RD-4Z100J-	1/4 10 OHM J	2	R588 R589
149	R CARBON FILM	RD-4Z101J-	1/4 100 OHM J	2	R814 R819
150	R CARBON FILM	RD-4Z103J-	1/4 10K OHM J	7	R812 R815 R824 R825 R826 R827 R853
151	R CARBON FILM	RD-4Z124J-	1/4 120K OHM J	1	R813
152	R CARBON FILM	RD-4Z222J-	1/4 2.2K OHM J	2	R811 R820
153	R CARBON FILM	RD-4Z393J-	1/4 39K OHM J	1	R828

No	Parts Name	Parts Code	Description	Qty	Location
154	R CARBON FILM	RD-4Z472J-	1/4 4.7K OHM J	4	R809 R810 R821 R822
155	R CARBON FILM	RD-4Z475J-	1/4 4.7M OHM J	1	R2
156	R CARBON FILM	RD-4Z561J-	1/4 560 OHM J	2	R805 R806
157	R CARBON FILM	RD-4Z562J-	1/4 5.6K OHM J	2	R837 R838
158	R CARBON FILM	RD-4Z563J-	1/4 56K OHM J	2	R807 R808
159	R CARBON FILM	RD-4Z681J-	1/4 680 OHM J	4	R846 R847 R848 R849
160	R CARBON FILM	RD-4Z683J-	1/4 68K OHM J	1	R823
161	R CARBON FILM	RD-4Z689J-	1/4 6.8 OHM J	4	[R743 R748] R842 R843 R844 R845
162	R CARBON FILM	RD-AZ100J-	1/6 10 OHM J	8	R004 R009 R206 R255 R545 R720 [R851] R907 R935
163	R CARBON FILM	RD-AZ101J-	1/6 100 OHM J	20	R008 R102 R227 R228 R301 R304 R313 R482 R546 R635 R654 R663 R664 R672 R719 R724 R728 R730 R801 R802
164	R CARBON FILM	RD-AZ102J-	1/6 1K OHM J	44	R208 R215 R216 R251 R256 R260 R261 R262 R263 [R323] R421 R422 R480 R481 R484 R485 R488 R489 R511 R521 R522 R563 R564 R580 R601 R602 R603 R604 R613 R614 R636 R647 R659 R725 R727 R734 R736 R737 R739 R740 R744 R746 R749 R906
165	R CARBON FILM	RD-AZ103J-	1/6 10K OHM J	45	L208 R213 R214 R254 R257 R258 [R441 R442 R443] R487 R579 R619 R620 R624 R639 R640 R641 R642 R653 R705 [R708 R709] [R710] R711 R712 R713 R714 R715 R716 R721 R722 [R731] [R732][R733] R735 R738 R755 [R756 R757 R758 R760] [R765] R776 R777 [R785R786] R840 R841 [R850] R905 R931 R932 R933 R934 R936 R937 R938
166	R CARBON FILM	RD-AZ104J-	1/6 100K OHM J	19	R109 R471 R472 R473 R474 R502 R510 R518 R519 R548 R549 R567 R568 R584 R585 R648 R671 R762 R764
167	R CARBON FILM	RD-AZ105J-	1/6 1M OHM J	6	R505 R508 R559 R560 R622 R665
168	R CARBON FILM	RD-AZ106J-	1/6 10M OHM J	1	R717
169	R CARBON FILM	RD-AZ109J-	1/6 1 OHM J	2	R901 R902
170	R CARBON FILM	RD-AZ121J-	1/6 120 OHM J	1	R551
171	R CARBON FILM	RD-AZ122J-	1/6 1.2K OHM J	-	R753
172	R CARBON FILM	RD-AZ123J-	1/6 12K OHM J	10	R259 R509 R523 R531 R532 R533 R538 R539 R557 R558
173	R CARBON FILM	RD-AZ124J-	1/6 120K OHM J	1	R513
174	R CARBON FILM	RD-AZ151J-	1/6 150 OHM J	5	R302 R305 R314 R627 R628
175	R CARBON FILM	RD-AZ152J-	1/6 1.5K OHM J	4	[R325] R778 R779 R780
176	R CARBON FILM	RD-AZ153J-	1/6 15K OHM J	5	R463 R464 R515 R553 R554
177	R CARBON FILM	RD-AZ154J-	1/6 150K OHM J	2	R503 R525
178	R CARBON FILM	RD-AZ181J-	1/6 180 OHM J	3	R303 R306 R315
179	R CARBON FILM	RD-AZ182J-	1/6 1.8K OHM J	3	R401 R402 R741

No	Parts Name	Parts Code	Description	Qty	Location
180	R CARBON FILM	RD-AZ183J-	1/6 18K OHM J	5	R201 R203 R526 R643 R644
181	R CARBON FILM	RD-AZ184J-	1/6 180K OHM J	6	R504 R625 R626 R637 R638 R651 [R723]
182	R CARBON FILM	RD-AZ220J-	1/6 22 OHM J	1	R534
183	R CARBON FILM	RD-AZ221J-	1/6 220 OHM J	4	R435 R552 R903 R904
184	R CARBON FILM	RD-AZ222J-	1/6 2.2K OHM J	11	R211 R212 R253 R264 R433 R434 R486 R581 [R729] R742 R745 R747
185	R CARBON FILM	RD-AZ223J-	1/6 22K OHM J	8	R107 R423 R424 [R444] R528 R530 R615 R616 [R753]
186	R CARBON FILM	RD-AZ224J-	1/6 220K OHM J	4	R629 R630 [R723] R726
187	R CARBON FILM	RD-AZ271J-	1/6 270 OHM J	6	R307 R316 R769 R771 R773 R775
188	R CARBON FILM	RD-AZ272J-	1/6 2.7K OHM J	8	R222 R223 R431 R432 R475 R478 R617 R618
189	R CARBON FILM	RD-AZ273J-	1/6 27K OHM J	6	R542 R555 R556 R833 R834 R839
190	R CARBON FILM	RD-AZ331J-	1/6 330 OHM J	5	R007 R308 R317 R483 R670
191	R CARBON FILM	RD-AZ332J-	1/6 3.3K OHM J	9	R005 R106 R221 [R324 R516 R541 R543 R835 R836
192	R CARBON FILM	RD-AZ333J-	1/6 33K OHM J	4	R621 R655 R656 R759
193	R CARBON FILM	RD-AZ334J-	1/6 330K OHM J	5	R650 R673 R718 R761 R763
194	R CARBON FILM	RD-AZ390J-	1/6 39 OHM J	1	[R765] [R767] [R784]
195	R CARBON FILM	RD-AZ391J-	1/6 390 OHM J	6	R309 R318 [R767] R768 R770 R772 R774
196	R CARBON FILM	RD-AZ392J-	1/6 3.9K OHM J	5	R403 R404 R529 R633 R634
197	R CARBON FILM	RD-AZ393J-	1/6 39K OHM J	6	R520 R537 R572 R586 R587 [R759]
198	R CARBON FILM	RD-AZ470J-	1/6 47 OHM J	5	R003 R209 R252 [R275] R657
199	R CARBON FILM	RD-AZ471J-	1/6 470 OHM J	2	R310 R319
200	R CARBON FILM	RD-AZ472J-	1/6 4.7K OHM J	25	R101 R103 R104 R105 R207 R210 R547 R561 R562 R565 R566 R573 R574 R575 R576 R577 R578 R582 R583 R645 R646 R662 R669 R752 R787
201	R CARBON FILM	RD-AZ473J-	1/6 47K OHM J	4	R512 R658 R750 R751
202	R CARBON FILM	RD-AZ474J-	1/6 470K OHM J	5	R217 R218 R501 R540 R661
203	R CARBON FILM	RD-AZ479J-	1/6 4.7 OHM J	1	R652
204	R CARBON FILM	RD-AZ561J-	1/6 560 OHM J	6	R311 R320 R569 R570 R571 R668
205	R CARBON FILM	RD-AZ562J-	1/6 5.6K OHM J	6	R476 R477 R527 R611 R612[R729]
206	R CARBON FILM	RD-AZ563J-	1/6 56K OHM J	4	R514 R517 R803 R804
207	R CARBON FILM	RD-AZ681J-	1/6 680 OHM J	2	R006 [R766] [R767 R781 R782 R783]
208	R CARBON FILM	RD-AZ682J-	1/6 6.8K OHM J	5	R219 R609 R610 R631 R632
209	R CARBON FILM	RD-AZ683J-	1/6 68K OHM J	6	R607 R608 R623 R649 R707 [R708 R709] [R760]
210	R CARBON FILM	RD-AZ689J-	1/6 6.8 OHM J	2	R743 R748
211	R CARBON FILM	RD-AZ820J-	1/6 82 OHM J	3	[R445 R446] R506 R605 R606
212	R CARBON FILM	RD-AZ821J-	1/6 820 OHM J	3	R312 [R321] R831 R832
213	R CARBON FILM	RD-AZ822J-	1/6 8.2K OHM J	4	R461 R462 R507 R524
214	R CARBON FILM	RD-AZ823J-	1/6 82K OHM J	4	[R276 R277] R535 R536
215	R CEMENT	RX02L228J-	2W 0.22 OHM J	2	R829 R830
216	R FUSIBLE	RF01F4780J	0.47OHM 1W	2	RF901 RF902

No	Parts Name	Parts Code	Description	Qty	Location
217	R SEMI FIXED	RV1417222-	1/10 2.2K OHM B V6EK-PV1S	1	RV601
218	R SEMI FIXED	RV6417223-	VM6CK-PV(1S) B 22K OHM	3	RV201 RV501 RV502
219	RESONATOR	5PCSA8MTZ-	"CSA8MTZ, 8MHZ"	1	XC701
220	RESONATOR CERA	5PCSA16R93	CSA16.93MXZ04	1	XC501
221	SW ENCORDER	5SH162401-	EC16B24204 24P W/DETENT	1	VR702
222	SW RELAY	5SC0101362	HR-RC112T2 12V 2A	-	RY801
223	SW RELAY	5SC0201103	HR-CR323 2C-1P DC12V	1	RY901
224	SW TACT	5S50101001	KPT-1105A 1C-1P	24	SW701 SW702 SW703 SW704 SW705 SW706 SW707 SW708 SW709 SW710 SW711 SW712 SW713 SW714 SW715 SW716 SW717 SW718 SW719 SW720 SW721 SW722 SW723 SW724
225	TR	TKRA107M--	KRA107M (KSR2006)	1	Q003
226	TR	TKRA111M--	KRA111-M TAPPING(KSR2010)	5	Q711 Q712 Q713 Q714 Q715
227	TR	TKRC107M--	KRC107-M TAPPING(KSR1006)	5	Q701 Q706 Q708 Q710 [Q717]
228	TR	TKRC111M--	KRC111M (KSR1010)	2	Q702 Q703
229	TR	TKSA928AY-	KSA928A-Y	2	Q501 Q502
230	TR	TKSC2331Y-	KSC2331Y	1	Q503
231	TR	TKSR1003--	KSR1003	1	Q504
232	TR	TZRA107M--	KRA107M (KSR2006)	2	Q613 Q614
233	TR	TZRA111M--	KRA111M	2	Q610 Q611
234	TR	TZRC107M--	KRC107M(AUTO)	2	Q618 Q716
235	TR	TZRC111M--	KRC111M	3	Q612 Q616 Q619
236	TR	TZTA1266Y-	KTA1266Y- (AUTO)(1015Y)	4	Q603 Q604 Q617 Q803
237	TR	TZTA1273--	KTA1273	1	Q901
238	TR	TZTA1273Y-	KTA1273Y(966Y)	4	Q615 Q705 Q707 Q709
239	TR	TZTC3194Y-	KTC3194Y	1	Q001
240	TR	TZTC3198Y-	KTC3198Y-(1815Y) (AUTO)	15	Q201 Q202 Q471 Q472 Q505 Q606 Q607 Q608 Q609 Q704 Q801 Q802 Q804 Q805 [Q806] Q902
241	TR	TZTC3205Y-	KTC3205Y (2236Y)	1	Q605
242	TRANS POWER	5TP8074763	EI=74X62 230V 50HZ	1	PT901
243	TUNER PACK	9737612700	FTA3-503V	1	TU001
244	VFD	DBJ638GK--	BJ638GK	-	FD701
245	VFD	DSVA09MM10	SVA09MM10	1	FD701
246	WIRE JUMPER	W581GY5095	AWG22 1/0.65 SN 5 AUTO	4	L801 L802 L841 L842
247	WIRE JUMPER	W581GY6095	AWG22 1/0.65 SN 6 AUTO	3	CC908 [L270] R002
248	WIRE JUMPER	W581GY7595	AWG22 1/0.65 SN 7.5 AUTO	1	R703
249	WIRE LEAD	9738834300	#26 1P 200MM	1	W601
250	X-TAL	5XA4R332M-	4.332M	1	XC270
251	X-TAL	5XA7R20000	7.2M	1	XC251